

SOV/32-24-10-57/70

AUTHOR:

Starkov, L. N.

TITLE:

Modification of the Construction of the Glass Circulation Pump
(Izmeneniye konstruktsii steklyannogo tsirkulyatsionnogo nasosa)

PERIODICAL:

Zavodskaya Laboratoriya, 1958, Vol 24, Nr 10, pp 1286-1287 (USSR)

ABSTRACT:

In studying the reaction kinetics in heterogeneous systems usually vacuum apparatus with a gas circulation in the closed system are used. The circulation takes place at a pressure of 10-760 mm by means of a glass piston pump. The modification of the construction as suggested makes its production simpler, decreases its dimensions, and increases the capacity of the pump. The capacity of the glass pump was doubled by the modifications carried out. A diagram of the pump with its description and dimensions is given. To interrupt the current a motor according to Uorren with 60 revs/min. can be used for the solenoid of the pump. A ring with 4-5 edges or a clockwork cogwheel with a corresponding number of cogs is applied to the axle of the motor. By a further installation a compact contact breaker is obtained which secures 200-300 pulses of the piston per minute. There is 1 figure.

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SOV/32-24-10-57/70

Modification of the Construction of the Glass Circulation Pump

ASSOCIATION: Institut metallurgii Ural'skogo filiala Akademii nauk SSSR
(Institute of Metallurgy of the Ural Branch, AS USSR)

Card 2/2

26040
S/137/61/000/007/007/072
A060/A101

183100

AUTHORS: Starkov, L. N.; Kochnev, M. I.; Gorshkova, L. S.

TITLE: On the selective sulfation of cobalt while roasting "anode mass".

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1961, 19, abstract 7G137
("Sb. nauchno-tekhn. tr. N.-i. in-t metallurgii Chelyab. sovnarkhoza"
1960, no. 2, 140-146)

TEXT: The optimal conditions for selective sulfation of Co while roasting sulfide alloys were investigated. An anode mass with composition (in percent): Ni 57.59, Co 9.96, Cu 0.96, Fe 4.85, S 23.12 was used. The selective sulfation of Co proceeds most effectively with an increase in temperature but not above the temperature of decomposition of the Co sulfate into a sulfide. As the coarseness of the roasted material varies from 0.18 - 0.25 mm to ≤ 0.09 mm, this temperature varies correspondingly from 700° to 650°C for an alloy with Co : Fe ratio of 1 : 0.5. As the coarseness of the material decreases the results of selective sulfation of Co improve. In the presence of Fe and Cu in the alloy the conversion of Co into a sulfate increases on account of secondary sulfation. The most favorable ratio of Fe : Co in the original alloy is equal to 1 : 1. In that case

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On the selective sulfation ...

the conversion of Ni into a sulfate is sharply reduced and the roasting temperature may be lowered to 600°C for material with a coarseness ≤ 0.09 mm.

N. Pleteneva

[Abstracter's note: Complete translation]

Card 2/2

STARKOV, L. N.; KOCHNEV, M. I.

Effect of structural transformations and characteristics of the
oxidation of nickel and copper-nickel matte. TSvet. met. 33
no.8:75-76 Ag '60. (MIRA 13:8)
(Nickel--Metallurgy) (Copper--Metallurgy)

STARKOV, L. N.

Cand Tech Sci - (diss) "Temperature dependence of the reactivity and physical properties of lower sulfides of nickel, cobalt, and their alloys in the solid state." Moscow, 1961. 19 pp; (Academy of Sciences USSR, Inst of Metallurgy imeni A. A. Baykov); number of copies not given; price not given; (KL, 7-61 sup, 246)

STARKOV, N., inzh.

Improved gas detector design. Mast. ug^t.7 no. 5:31 My '58.
(MIRA 11:7)

(Gas detectors)

KELDYSH, M.V., akademik; FEDOROV, Ye.K., akademik; ARTSIMOVICH, L.A., akademik; SISAKYAN, G.P., akademik; GORSKIY, I.I.; PAPITSA, P.L.; FOK, V.A.; LANDAU, L.D.; LIFSHITS, Ye.M.; SHAL'NIKOV, A.I.; KHALATNIKOV, I.M.; AIERSEYEVSKIY, N.Ye.; VAYNSHTEYN, L.A.; PALLADIN, A.V., akademik; SATFAYEV, F.I., akademik; AMBARTSUMYAN, V.A., akademik; LUPREVICH, V.F.; MUSTELI, N.I., akademik; KARAKEYEV, K.K.; MUSTEL', E.R.; MASEVICH, A.G., doktor fiz.-matem.nauk; EFRON, K.M.; MARTYNOV, D.Ya., prof.; GAIROD'YEV, A.A., akademik; MAROV, K.K., prof.; COLOVKOVA, A.G., prof.; FILATOVA, L.G., prof.; FEYVE, Ya.V.; SEMIKHATOV, B.N., prof.; TIKHIV, A.G.; RYCHAGOV, G.I.; BARSKAYA, V.F.; VLASOVA, A.A.; BARANOVA, Ye.F.; KIBARDINA, L.A.; ISACHENKO, A.F.; IL'INA, Yu.P.; DANILOV, A.I., prof.; PLAUME, K.K.; NECHAYEVA, T.N., prof.; CHEPEK, L., doktor; SZANTO, Ladislav, akademik; BELACHIK, Yozef; FAN KLOK V'YEN; ENGENSON, M.S., prof. (L'vov); STARKOV, N.; AERAMOVICH, Yu.; VOSKRESENSKIY, V.; KROPACHEV, A.; REZVOY, D., prof., (L'vov); KONDRAIEV, V.N., akademik; LEEBEDINSKIY, V.I., kand.geol.-mineral.-nauk; YASHIN, A.L., akademik

"Priroda" is 50 years old. Priroda 51 no.1:3-16 Ja '62.

(MIRA 15:1)

1. Prezident AN SSSR (for Keldysh). 2. Glavnnyy uchenyy sekretar' Prezidiuma AN SSSR (for Fedorov). 3. Akademik-sekretar' Otdeleniya fiziko-matem.nauk AN SSSR (for Artsimovich). 4. Akademik-sekretar' Otdeleniya biologicheskikh nauk AN SSSR (for Sisakyan). 5. Chlen-korrespondent AN SSSR, zamestitel' akademika-sekretarya Otdeleniya

(Continued on next card)

USSR

Quartz porphyries of the Kvarkush Range (Ural). N. V. Zykin and N. P. Stukov (A. M. Gor'ki State Univ., Molotov). *Doklady Akad. Nauk S.S.R.* 72, 285-6 (1950).— Most of the quartz porphyries on the western slope of the North Ural Mountains have undergone intense metamorphisms, and are externally very similar to the surrounding cryst. schists. But they still show in their microscopic structure often well-developed fluidal textures of the original porphyry intrusions. Minerals of primary magmatic type are quartz feldspars (plagioclase with about 40% An in the central parts, albitized in the peripheral parts), and magnetite. Epimagmatic are a green biotite, albite, calcite, epidote, rutile, and hematite. Often even spherulitic quartz-feldspar aggregates are preserved in the groundmass. They are 0.2-0.4 mm. in diam., with biotite, epidote, or hematite in the centers (micro-lepto-granoblastic structure type). The ns of the biotite are $\gamma = 1.614$; $\beta = 1.612$; $\alpha = 1.576$; $2V = -2^\circ$; angle $c:\beta = 0^\circ$; $\gamma - \alpha = 0.038$. Chem. analyses are given of 3 fluidal and massive quartz porphyries. The somewhat anomalous chem. compn. indicates the metamorphic changes of the rocks from the original magmatic type. This metamorphism is typical for the Kvarkush anticlinal geologic unit in the Ural. In the central parts of this anticline, granitic-acidic intrusions are characteristically developed. W. Etel

C A

8

Optical anomalies in garnets from Gora Saroba, Southern Ural. N. P. Starkov (State Univ., Molotov). *Zapiski Vsesoyuz. Mineral. Obschestva* (Mém. soc. russe minéral.) 79, 283-90 (1950).—The garnet is observed in skarns at the contacts of an intrusive plagiogranite and porphyrite with sedimentary rocks, in intimate paragenesis with epidote, diopside, zoisite, and actinolite. There are two varieties of garnet, one, which is the older, dark-brown or reddish colored, the second brighter, or greenish. Only the first type shows the anomalies described. The crystal habit is (110), with a very characteristic multiple zoning (6 to 32 zones) strictly parallel to the (110) faces. The central cores are often homogeneous, and may be multiple. The zones are alternately dark-colored and nearly colorless, with a birefringence of 0.006, of biaxial, pos. or neg. character, and an optical angle of $2V = 70$ to 75° . The chem. analyses show that in the dark reddish brown garnet there are 82.1% andradite mol., 3.5 grossularite, 5.6 almandite, as essential constituents, while the brighter-colored garnet has 82.3% andradite, 0.9 grossularite, 3.5 almandite.

W. Eitel

ENTSOV, G. I.; IGNAT'YEV, N. A.; STARKOV, N. P.

Volkonskite - Kama Valley

Study of the geologic-petrographic characteristic of volkonskite deposits of the Kama region. Zap. Vses. min. ob. 81 No. 3, 1952

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified

STARKOV, N. P.

USSR/Petrography

Card 1/1

Authors : Starkov, N. P; Kobyak, A. N. and Chirvinskiy, P. N.

Title : About the Petrography of rocks of crystallic base of the Molotov
region (oblast')

Periodical : Dokl. AN SSSR, 95, 6, 1309 - 1311, 21 Apr 1954

Abstract : The article gives an analysis of the crystallic base of the Molotov
oblast' (region). By the method of the integrational table, two
tables, given in the article, have been compiled. One of them gives
the quantitative content of the base; the other the chemical content
of gneissoid-granites which form the base.

Institution : A. M. Gorkiy State University at Molotov

Submitted : 18 Feb 1954

STARKOV, N. P.

STARKOV, N. P.- "Petrographic Characteristics of Rocks of the Left Bank of the Vishera River and the Region Between the Uls and Vels Rivers and of the Kvarkush Plateau in the Urals." Min of Higher Education USSR, Molotov State U imeni A. M. Gor'kiy, Molotov, 1955 (Dissertations for the Degree of Candidate of Geological-Mineralogical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

S T A R K O V N P

15

✓ Chlorite in quartz veins of the Zerkush Plateau in the Ural. N. P. Starov (State Univ., Molotov). *Zapiski Vsesoyuz. Mineral. Obshchnosti* 53, 605-8 (1957). In diaphoritic micaceous quartzites, and multiple albite-chlorite-sericite-quartz schists, epidote-albite-actinolite schists, epidote-glaucophane-quartz schists, with gabbro diabase intrusions, hydrothermal veins are scarcely developed, among which albite-chlorite-quartz assocons are particularly interesting. The chlorite is dark-green, fine-scaly, filling small lenses and veins, with characteristic worm-shaped aggregates of 0.3 to 0.5 mm. length, of the tabular crystals stacked together in typical multilayer parcels. Chlorite distinctly replaces older albite in these veins. Extinction parallel, $\gamma = 1.632$; $\alpha = 1.628$; weak pleochroism in yellowish and greenish tints; absorption $\alpha > \gamma$; blue-violet anomalous interference colors. Analysis: SiO_2 28.65; Al_2O_3 23.80; TiO_2 trace; Fe_2O_3 0.93; FeO 21.23; MnO 0.43; MgO trace; MgO 16.28; CaO 0.30; $\text{H}_2\text{O} + 9.93$; $\text{H}_2\text{O} = 1.04\%$. The octahedral coordination trivalent cations (Al^{3+} , Fe^{3+}) are nearly equal in no. to those in tetrahedral coordination in the crystallochem. formulae which corresponds to a prochlorite in Serdyuchenko's classification of the chlorites (series prochlorite-corundophilite). A micro-thermal analysis shows two endothermic effects of dehydration at 550° to 630° (strong), and 700° to 780° (weak), and a weak exothermic effect at 850° ; this indicates the formation of forsterite. A slight endothermic effect at 440° corresponds to the dehydration of brucite.

W. Bitel

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GS 1 and 1/1

STARKOV, N.P.

Correlation of gabbro-diabases in the eastern Russian Platform and
on the western slopes of the Central and Northern Urals. Izv. vys.
ucheb. zav.; geol. i razved. 3 no.9:56-59 S '60. (MIRA 13:12)

1. Permskiy gosudarstvennyy universitet.
(Russian Platform--Diabase) (Ural Mountains--Diabase)

RUMYANTSEVA, N.A.; STARKOV, N.P.

Ancient ultrabasic alkaline rocks of the western slope of the Urals and in the Ural Mountain region. Dokl. AN SSSR 135 no.2: 407-409 N '60. (MIRA 13:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut i Permskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
Predstavлено академиком V.S. Sobolevym.
(Ural mountain region--Rocks, Igneous)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3

KETOV, A.N.; PECHKOVSKIY, V.V.; STARKOV, N.P.; VARSKOY, B.N.

Preparation, composition, and certain properties of basic cadmium sulfate. Zhur.neorg.khim. 6 no.9:2009-2013 S '61. (MIRA 14:9)
(Cadmium sulfate)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3"

STARKOV, N.P.

Sepiolite from Kungurian sediments in the Kama Valley. Zap.Vses.min.
ob-va 92 no.4:479-484 '63. (MIRA 17:2)

I. Kafedra mineralogii i petrografii Permskogo gosudarstvennogo uni-
versiteta.

TRISVYATSKIY, A.Ya.; TSUKANOVA, Yu.A.; GEL'FAND, M.R.; MYTNIK, A.I.;
PASHNIKOVA, Yu.A.; FRANTSEVA, Ye.N.; TOLKUYEVA, F.A.; FOMIN, M.I.;
STARKOV, N.Ye., red.; KOLOMIYETS, K.A., tekhn. red.

[Economy of Kursk Province; a statistical manual] Narodnoe
khozisistvo Kurskoi oblasti; statisticheskii sbornik. Orel,
Gosstatizdat, 1958. 198 p. (MIRA 11:12)

1. Kursk(Province). Oblastnoye statisticheskoye upravleniye.
 2. Nachal'nik Statisticheskogo upravleniya Kurskoy oblasti(for Starkov).
 3. Rabotniki Statisticheskogo upravleniya Kurskoy oblasti(for all
except Fomin, Starkov, Kolomiyets)
- (Kursk Province--Economic conditions--Statistics)

LATYSHEV, G.G., glav. red.; STARKOV, N.Ye., otv. za vypusk;
GROZNYKH, A.A., tekhn. red.

[Economy of Sverdlovsk Province; statistical abstract]
Narodnoe khoziaistvo Sverdlovskoi oblasti; statisticheskiy sbornik. Sverdlovsk, Gosstatizdat, 1962. 230 p.
(MIRA 16:11)

1. Nachal'nik statisticheskogo upravleniya Sverdlovskoy oblasti (for Latyshev).
(Sverdlovsk Province--Statistics)

82731
S/089/60/009/002/002/015
B006/B056

21.1920

AUTHORS: Slyusarev, P. N., Ushakov, G. N., Starkov, O. V.
Kochetkov, L. A., Nesterova, L. N., Kozlov, V. Ya.

TITLE: Investigation of the Transfer of Radioactive Substances by
Steam and Water and the Chemical Stability of Deposits
in the Steam - Water Cycle of the First Atomic Power Plant

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 2, pp. 98-103

TEXT: The quantity of radioactive substances carried along in boiling-water reactors by steam and water, their depositing on the inner surfaces of conduction pipes, as well as the chemical nature and the behavior of these deposits depends essentially on the mode of operation of the reactor and the construction of the evaporators and separators. In the plants of the Pervaya atomnaya elektrostantsiya (First Atomic Power Plant), the authors investigated the processes in which radioactive substances are carried along by steam and water. They determined the depositing coefficient of the substances on the inner surfaces of the conduction pipes and investigated the chemical stability of these deposits. They further

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Investigation of the Transfer of Radioactive
Substances by Steam and Water and the Chemical
Stability of Deposits in the Steam - Water
Cycle of the First Atomic Power Plant

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investigated problems of the deactivation of some parts of the steam-power equipment of the plant. The steam-water loop consists of two circuits of stainless steel of the grade 1X18H9T (1Kh18N9T), which are insulated against each other. Fig. 1 schematically shows the investigated loop; Table 1 gives data on the two circuits. The coolant used was ordinary distilled water which was kept in circulation by means of pumps. The investigations were carried out with superheated and non-superheated steam; water temperatures, in the first case, amounted to 275°C at the input, and 340-365°C at the output; in the second case they were 265° and 310°C, respectively (with a 25% steam content). The places where samples were taken are given in Fig. 1; the β- and γ-activity was measured on all coolant samples, and the quantity of the dry residue, the pH-value, as well as the radioisotopic, anionic, and cationic components of the contamination were determined. The transfer of radioactive substances was determined from the change in radioactivity of the dry residue along the loop. Table 2 gives a multiple of numerical values of the radioactivity of the dry residue of the coolant determined at various places in circuit II. The

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Investigation of the Transfer of Radioactive
Substances by Steam and Water and the Chemical
Stability of Deposits in the Steam - Water
Cycle of the First Atomic Power Plant

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time-dependent change in these radioactivities at various places of the loop are shown in Fig. 2. The results obtained by physicochemical investigations of feed water and the water of cycles I and II are given in Table 3. It supplies the following data: dry residue, total activity ($\beta + \gamma$), pH, CO_2^- , NO_3^- , Cl^- -concentration, total chromium concentration, CrO_4^{2-} and Cr^{3+} -concentration. The contamination consisted of: Co^{60} , Fe^{59} , Cr^{51} , Ca^{45} (4-10% of the total activity); Na^{24} , Cu^{64} , Ni^{65} , Si^{31} , Mn^{56} (90-96% of the total activity). Components with $T_{1/2} < 1$ hour were not taken into account. The radioactivity and chemical stability of the deposits on the tube walls were determined by means of a special device consisting of two equal tubes made from 9M-695 (EI-695) steel. Data on outward shape, thickness, radioactivity, and temperature of the walls are given in Table 4, and data on chemical stability in Table 5. The deposits consisted of Co^{60} , Fe^{59} , Cr^{51} , Ca^{45} ($T_{1/2} \geq 27$ days) (70%) and of

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Investigation of the Transfer of Radioactive
Substances by Steam and Water and the Chemical
Stability of Deposits in the Steam - Water
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B006/B056

Na^{24} , Cu^{64} , Mn^{56} , Ni^{65} , and Si^{31} ($T_{1/2} \leq 13$ hours) (30%). Finally, a report is given on deactivation experiments undertaken with various aggressive solutions with and without inhibitors. A 6% HCl + Urotropin and a 5% HNO_3 + 2% HCl + $\text{K}_2\text{Cr}_2\text{O}_7$ solution (~ 0.05 g/l) were used as solutions with inhibitors, and a 5% HNO_3 and a 5-7% HCl solution as solutions without inhibitors. The experiments were carried out at 20°C for 24 to 48 hours and at 40-60°C for 2 to 4 hours. The results obtained are described in detail. The authors thank A. K. Krasin for his interest in this investigation. There are 2 figures, 5 tables, and 6 references: ✓
4 Soviet and 2 US.

SUBMITTED: November 23, 1959

Card 4/4

GRIGOR'YEV, V.P.; LUZGIN, V.P.; ABROSIMOV, Ye.V.; ORLOV, V.I.; YAVOYSKIY, V.I.;
GURSKIY, G.L.; GONCHAROV, I.A.; STARKOV, P.A.

Materials balance in the scrap metal-iron ore process. Izv. vys.
ucheb. zav.; chern. met. 5 no.5:63-67 '62. (MIRA 15:6)

1. Moskovskiy institut stali zavod "Zaporozhstal!".
(Steel—Metallurgy)

AEROSIMOV, Ye.V.; YAVOYSKIY, V.I.; LUZGIN, V.P.; STARKOV, P.A.; SURGUCHEV,
G.D.; GRIGOR'YEV, V.P.

Automatic control of the open-hearth process. Izv.vys.ucheb.zav.;
chern.met. 5 no.11:37-41 '62. (MIRA 15:12)

1. Moskovskiy institut stali i splavov.
(Open-hearth process) (Automatic control)

STARKOV, P. A.; ABROSIKOV, Ye. V.

Statistical analysis of decarburization and metal heating processes
in basic open-hearth furnaces. Izv.vys.ucheb.zav.; chern.met.7
no. 5:46-52 '64. (MIRA 17:5)

1. Moskovskiy institut stali i splavov.

STARKOV, P. M.

Bee culture

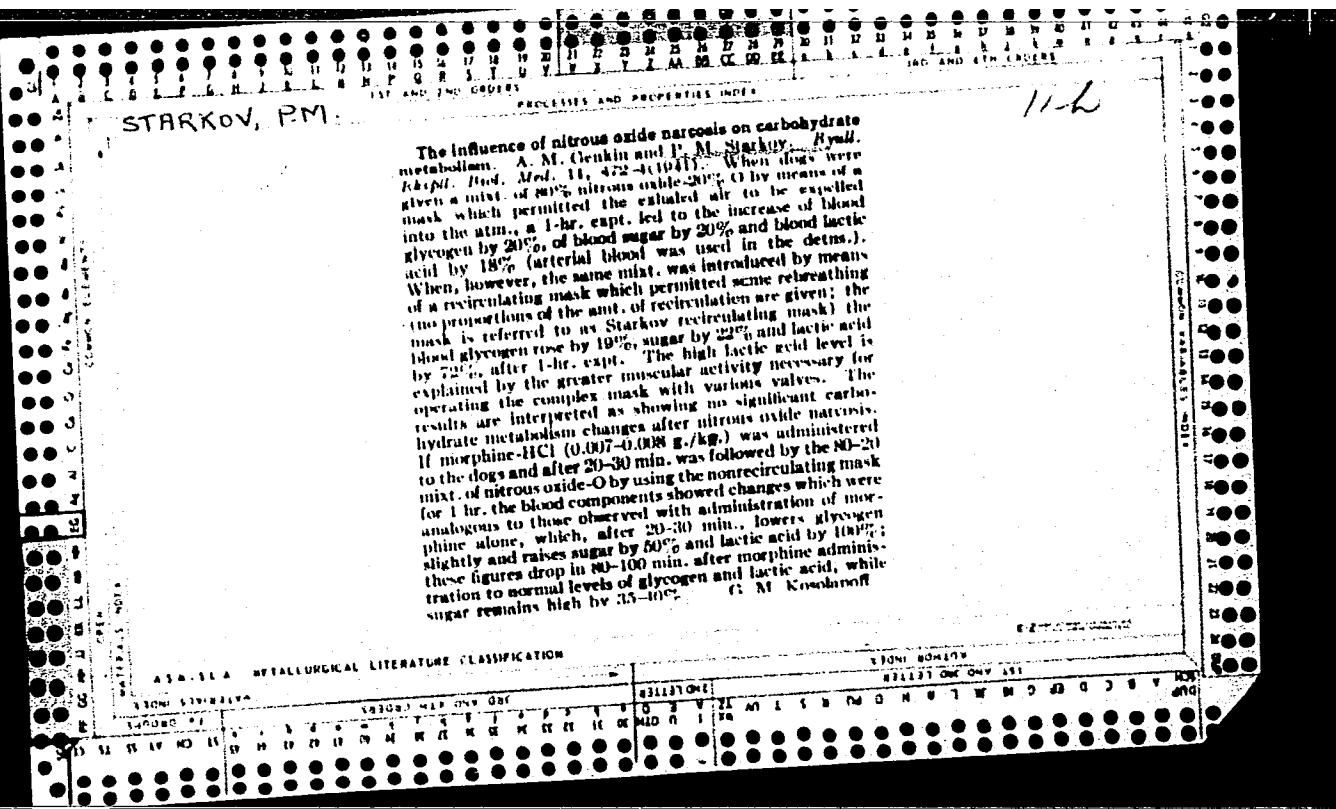
Strong families in double hives are a guarantee of large honey yields.
Pchelovodstvo. No. 2, 1952.

9. Monthly List of Russian Acquisitions, Library of Congress, May 1952 Uncl.

STARKOV, P.M.

The oxygen tension of alveolar air after inhalation of pure nitrous oxide. P. M. Starkov and M. A. Ukolova. Bull. biol. med. exp. U.S.S.R. 7, 57-60 (1939) (in English). — The admissible no. of deep inhalations of pure N₂O is 1-2. The 3rd inhalation decreases the O₂ satn. of alveolar air to 0.7%, while further inhalation inevitably results in an O₂ deficiency. S. A. Karjala

ASU-SEA METALLURGICAL LITERATURE CLASSIFICATION



STARKOV, P. M., ZHEREBCHENKO, P. G., KLYKOV, N. V. and KARPOVICH, O. A.

"Changes in the Functions of the Central Nervous System in Experimental Hypothermia," published in the Proceedings of the Eighth All-Union Congress of Physiologists, Biochemists, and Pharmacologists, Moscow, 1955.

Abstract 1091961

STARKOV, P. M.

Summaries of papers presented at the XXVI Congress of Surgeons of the
USSR, Moscow, 20 - 27 January 1955, included:

Reflex Regulations in Conditions of Acute Hypothermia

P. M. STARKOV

SOURCE: ~~Document No. A-46013~~ (Official Publication) Unclassified.

STARKOV, P.M.,

Pumping action of the heart and its arrest at low temperatures
[with summary in English]. Eksper.khir. 1 no.4:9-14 Jl-Ag '56
(MIRA 11:10)

1. Izkafedry normal'noy fiziologii (zav. prof. P.M. Starkov)
Kubanskogo medistinskogo instituta, Krasnodar.

(HEART, physiol.

pressure volume, eff. of hypothermia in dogs, ECG (Rus))
(HYPOTHERMIA, eff.

on pressure volume of heart in dogs, ECG (Rus))
(ELECTROCARDIOGRAPHY,

eff. of hypothermia on cardiac pressure volume in dogs
(Rus))

STARKOV, P.M.; POKROVSKIY, V.M.

Cortical regulation of micturition in man. Fiziol.zhur. 42 no.10:
887-892 0 '56. (MLR 9:12)

1. Kafedra normal'noy fisiologii i Kafedra gospital'noy khirurgii
Kubanskogo meditsinskogo instituta, Krasnodar.

(REFLEX, CONDITIONED,

conditioned regulation of diuresis, observations in
bladder ectopy in man (Rus))

(DIURESIS, physiology,

conditioned regulation, observations in bladder ectopy in
man (Rus))

(BLADDER, abnormalities,

ectopy, observations on conditioned regulation of diuresis
in man in (Rus))

STARKOV, P.M.

[Acute hypothermia; development of hypothermia and restoration of
functions of the refrigerated organism in warm-blooded animals]
K probleme ostroj gipotermii; razvitiye gipotermii i vospstanovlenie
funktsii pereokhlazhennogo organizma teplokrovnykh zhivotnykh.
Moskva, Medgiz, 1957. 288 p. (MIRA 11:4)
(HYPOTHERMIA)

Country : USSR
 CATEGORY : Pharmacology, Toxicology, Narcotics V
 ABS. JOUR. : RZBiol., No. 12 1958, No. 56591
 AUTHOR : Sivashinskaya, V.M.
 INSTIT. : Russian Medical Institute
 TITLE : The limit of the toxic effect of nitrous oxide
 ORIG. PUB. : Nauchn. Tr. Kubansk. Med. Inst., 1957, vol. 15,
 no. 25, p. 31
 ABSTRACT : Rats were placed in a chamber ventilated with a mixture of 40% oxygen and 60% nitrous oxide. The pressure was increased every 5 min by 1, 1.5, 2, 2.5, etc. atmospheres. Above 3 atmospheres the pressure was raised only in increments of 0.1 atmosphere. The original frequency of respiration was 56-96/min. Upon raising the pressure of N₂O by 1-1.75 atmosphere, respirations increased, but with further elevation they decreased and their amplitude was diminished. At excessive pressures of nitrous oxide (1.75-2.800 mm. Hg), respiration ceased. With increased pressure, the heart rate was slowed somewhat; there was
 CARD: 1/2

V. M. SIVASHINSKAYA :

ABS. JOUR. : RZBiol., No. 12 1958, No.

AUTHOR :

INSTIT. :

TITLE :

ORIG. PUB. :

ABSTRACT : a slight change in conduction of stimulation, and both the cardiac diastole and ventricular contraction were prolonged somewhat. Activity of the heart ceased on an average of 14 min after cessation of respiration. Sleep ensued at a pressure of nitrous oxide of 9.0 mm. Hg. The ratio of the narcotic dose to the toxic dose is 1:27. -- V.G. Sivashinskaya

CARD:

2/2

STARKOV, P M , Ed.

The problem of Acute Hypothermia. New York, London, Pergamon Press, 1960.

319 p. illus., diagrs., graphs, tables.

Translated from the original Russian: K Probleme Ostrooi Gipotermii, Moscow, 1957.

Includes References.

27.230

39283

S/239/62/048/006/001/002

I015/I215

AUTHOR: Starkov, P. M. and Aganyants, Ye. K.

TITLE: Recovery of EEG after hypothermia

PERIODICAL: Fiziologicheskiy zhurnal SSSR imeni I. M. Sechenov, v. 48, no. 6, 1962, 629-637

TEXT: The recovery of EEG after hypothermia of 15-20°C was studied by chronic experiments on 7 cats and 12 rabbits. A total of 21 experiments with hypothermia and 3 control experiments without hypothermia, were performed (8 on cats and 13 on rabbits). When the body temperature of cats and rabbits was decreased to 15-20°C, the electrical activity of the brain became markedly lower, but provided the animal's respiration was not artificially maintained, the bioelectric activity did not disappear completely. The recovery of EEG in cats, after a hypothermia of 17-20°C, began at a temperature of 23°C. The frequency of α and β rhythms, as well as the voltage of the α -wave, was almost recovered at 35°C. The normalisation of EEG in rabbits began at 25°C. The complete recovery of cortical response reaction occurred in cats 30 minutes, and in rabbits 2 days, after the animal's body temperature had returned to normal. Diffuse cortical inhibition due to hypothermia may last for some hours to several days. There are 4 figures. The most important English-language references read as follows: Callachan J., D. McQueen, J. Scott, W. Bigelow, Surg., 68, 2, 208, 1954. — Cooper K., Brit. Journ. Anaesth., 31, 3, 96, 1959. — Martin J. M., A.

Card 1/2

Recovery of EEG after...

S/239/62/048/006/001/002
I015/I215

Faulconer, R. Bickford, Anesthesiology, 20, 3, 359, 1959. — Niazi S. A., F. J. Levis, Annals Surgery, 147, 2, 264, 1958. — Stevenson G. C., W. F. Collins, C. T. Randt, T. D. Saurwein, Am. Journ. Physiol., 194, 2, 423 1958.

ASSOCIATION: Kafed. normal'noy fiziologii Kubanskogo meditsinskogo instituta, Krasnodar (Chair of Normal Physiology, Medical Institute of Kuban, Krasnodar)

SUBMITTED: January 21, 1961

Card: 2/2

STARKOV, P.M.

"Functions of the respiratory centre during deep hypothermia/"

Report submitted, but not presented at the 22nd International
Congress of Physiological Sciences.
Leiden, the Netherlands 10-17 Sep 1962

STARKOV, P.M., prof., red.; AKOPOV, I.E., prof., red.; KOSTIN, A.P.,
prof., red.; PYATNITSKIY, N.P., prof., red.; LATYSHEV, V.A.,
dots., red.; AGANYANTS, Ye.K., kand. med. nauk, red.

[Materials of the 14th Conference of Physiologists of the
Southern R.S.F.S.R.] Materialy Konferentsii fiziologov iuga
RSFSR Krasnodar, Vses. fiziologicheskoe ob-vo im. I.P.
Pavlova, 1962. 406 p. (MIRA 17:9)

1. Konferentsiya fiziologov yuga RSFSR. 14th, Krasnodar, 1962.
2. Kafedra normal'noy fiziologii Kubanskogo meditsinsko'
instituta, Krasnodar (for Aganyants).
3. Zaveduyushchiy kafedroy
farmakologii Kubanskogo meditsinskogo instituta, Krasnodar (for
Akopov).
4. Zaveduyushchiy kafedroy fiziologii zhivotnykh Kuban-
skogo sel'skokhozyaystvennogo instituta, Krasnodar (for Kostin).
5. Zaveduyushchiy kafedroy anatomii i fiziologii Krasnodarskogo
pedagogicheskogo instituta (for Latyshev).
6. Zaveduyushchiv
kafedroy biokhimii Kubanskogo meditsinskogo instituta, Krasnodar
(for Pyatnitskiy).
7. Zaveduyushchiy kafedroy normal'noy fizio-
logii Kubanskogo meditsinskogo instituta, Krasnodar (for Starkov).

ACC NR: A16030065

SOURCE CODE: UR/0000/66/000/000/0352/0353

AUTHOR: Starkov, P. M.

ORG: none

TITLE: Mechanism of action of deep hypothermia on brain functions ✓
at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966

PAPER PRESENTED
SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy
kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii,
Moscow, 1966, 352-353

TOPIC TAGS: hypothermia, central nervous system, animal physiology, neurophysiology,
hypoxia, brain bioelectricity

ABSTRACT:

The cessation of central nervous system functions in deep hypothermia is consecutive; on cessation of respiration, which occurs at a body temperature of 16° to 20° C, the life of the homoiothermic organism

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ACC NR: A1603665
ceases as a whole. However, artificial respiration with oxygen and simultaneous application of artificial circulation makes it possible to obtain a super-deep hypothermia in which some cerebral functions persist down to a body temperature of about 10° C. This indicates that not only the effect of hypothermia, but also the effect of hypoxia, is involved. In order to compare the effect of these two factors, a study was made of the process of conditioned reflex suspension, convulsive reaction, direct excitation of cortical cells, EEGs, evoked potentials, and strychnine discharges during both generalized hypothermia and localized application of cold to the brain. Generalized hypothermia was induced by means of a cooled blanket. The effect of cold on the brain alone was studied by placing special miniature thermodes or cooling elements against the animal's head, or by cooling the blood in an external circulatory loop feeding the head, or else by perfusion of the cerebral ventricles.

The investigations showed that although in generalized hypothermia, conditioned reflexes disappear entirely at a rectal temperature of 27° to 30° C (O. A. Karpovich), the motor region of the cortex controlling a given paw of a cat can be cooled to 6° to 10° C before the conditioned reflex disappears (experiments of Yu. M. Pergov). The ability of the

Card 2/4

ACC NR: AT6036665

to be the case from the cold stopping or "starting" of the respiratory center (experiments of A. N. Golovin and N. V. Klykov). In the process of inhibition of the formation both of convulsions and of a simpler reaction, not only the effect of cold, but also the effect of accompanying hypoxia, may have a part. Finally, at the level of the simplest properties of centers such as the generation of biocurrents, the observed direct faradic excitability of cells and adequate afferent excitability of cells during generalized hypothermia are less the direct effect of cold than of the accompanying hypoxia. [W.A. No. 22; AID Report 66-110]

SUB CODE: 06 / SUBM DATE: 00May66

Card 4/4

VELICHKOVSKIY, B.T., kand.med.nauk; RAGOL'SKAYA, F.S., kand.med.nauk;
STARKOV, P.S., mladshiy nauchnyy sotrudnik

Experimental investigations in the pathogenesis of silicosis.
Sbor. rab. po silik. no.2:171-184 '60. (MIRA 14:3)

I. Sverdlovskiy nauchno-issledovatel'skiy institut gigiyeny truda
i profpatologii.
(LUNGS--DUST DISEASES)

STARKOV, S.I.

Practices in operating suction and dust-removing equipment.
TSement 30 no.4:17-18 Jl-Ag '64.

(MIRA 17:11)

1. TSementnyy zavod "Krasnyy Oktyabr".

ONTIN, Ye. I.; STARKOV, S.P.;

Rated method of determining dust settling in mine workings as a basis for standardizing shale protection. Vop. bezop.v ugol'.shakh.
4:133-150 '64. (MIRA 18:1)

STARKOV, S.P.; FEDOSYUK, L.G.; ZAKHAROVA, D.K.; BATURINA, Ye.N.

Ion exchange resins as catalysts in organic synthesis. Part 1:
Alkylation of phenol with a mixture of n-alkylenes in the presence
of the cation exchanger KU-2. Zhur.ob.khim. 33 no.7:2237-2238
Jl '63. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh
reaktivov i osobo chistiykh khimicheskikh veshchestv, Donetskii
filial.

(Phenols) (Alkylation) (Ion exchange resins)

FEDOSYUK, L.G.; STARKOV, S.P.; ZAKHAROVA, D.K.; BATURINA, Ye.N.

Sec. pentylphenols. Met. poluch. khim. reak. i prepar.
no.6:89-91 '62. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh
reaktivov i osob chistykh khimicheskikh veshchestv, Donetskiy
filial.

STARKov, S. P.

Sulphonation reaction. XI. Determination of benzene-di-

genesis of
disulfide

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3"

and
STARKOV, S. P., Master Chem Sci —(uss) "The formation and isomerization of
benzene polysulfides." Ivanovo, 1957, 12 pp. (In Higher Educ USSR. Ivanovo
Chem-Tech Inst), 100 copies. (KL, No 41, 1957, p. ~~10~~)

4

Synthesis of 1,2- and 1,4-benzenedisulfonic acids. B. I.

Karavaev and S. P. Starkov (Chem. Technol. Inst., Tver)

Zhur. Khim. Tekhnol. 27, 788 (1955) 4 vol. 1

purified benzo-2-benzenesulfonic acid and 5.7 g

benzene-1,4-disulfide were added to 1.5 g

anhydrous aluminum chloride in 10 ml. of benzene.

The mixture was heated at 100° for 3 hrs. and then

the reaction mixture was cooled and extracted with

ether. After separation of the ether layer, it was

heated at 100° and treated with PCl_3 (initial wt. 30 min. at

100°). After adding 1.5 g $\text{Na}_2\text{S}_2\text{O}_5$ the temperature was

lowered to 50° and the reaction mixture was

then heated at 50° for 3 hrs. After cooling, the

reaction mixture was extracted with ether.

STARKOV, S.P.

SPRYSKOV, A.A.; STARKOV, S.P.

Sulfonation reaction. Part 43: Sulfonation of benzene to disulfonic acids. Zhur. ob. khim. 27 no.10:2780-2786 O '57. (MIRA 11:4)

1. Ivanovskiy khimiko-tehnologicheskiy institut.
(Benzene) (Sulfonation) (Fulfonic acids)

AUTHORS:

Starkov, S. P., Spryskov, A. A.

79-11-33/56

TITLE:

Investigation of the Sulfonation Reaction
(Izuchenie reaktsii sulfonovaniya).
XLIV. The Isomerization of Benzene Disulfonic Acids
(XLIV. Izomerizatsiya benzoldisulfikislot).

PERIODICAL:

Zhurnal Obshchey Khimii, 1957, Vol. 27, № 11,
pp. 3067-3071 (USSR)

ABSTRACT:

The m- and p-benzene disulfonic acids forming on sulfonation of benzene at a sufficiently high temperature in an aqueous sulfuric medium pass one into the other until a certain equilibrium between them is attained. In connection with some foreign papers (Holleman and Pollack) the object of the present paper was to obtain exact details on the state of equilibrium between the meta- and para-isomers, on the isomerization of o-benzene disulfonic acid, on the dependence of the speed of isomerization on the concentration of the sulfuric acid and other conditions of equilibrium. Thus the influence of the concentration of sulfuric acid upon the time of isomerization of the m-benzene disulfonic acid was investigated. With an increase in concentration of 90 to 100 % the speed of isomerization at 206-233°C decreases; it is

Card 1/2

Investigation of the Sulfonation Reaction.
XLIV. The Isomerization of Benzene Disulfonic Acids

79-11-33/56

highest at 90% (206°C) and at 87% (235°C). The isomerization of the o-benzene disulfonic acid at 233°C proceeds rapidly, so that after 2,5 hours only 7% of the raw product remains. The isomerization of the m- and p-benzene disulfonic acids proceeds slowly. By heating of the meta- and para-isomer at 235°C in the course of 200 hours in the presence of 67% sulfuric acid a state of equilibrium is practically attained between the isomers (66,3% meta- and 33,7% para-isomer). There are 3 tables, and 6 references, 4 of which are Slavic.

ASSOCIATION: Ivanovo Chemical-Technological Institute
(Ivanovskiy khimiko - tekhnologicheskiy institut).

SUBMITTED: October 17, 1956

AVAILABLE: Library of Congress

1. Benzene disulfonic acids - Isomerism

Card 2/2

STARKOV, S.P.; SPRYSKOV, A.A.

Study of the sulfonation reaction. Part No. 52: Formation
of sulfones and their sulfonic acids in the sulfonation of benzene.
Izv. vys. ucheb. zav; khim. i khim. tekhn. 3 no. 5:868-871 '60.
(MIRA 13:12)

1. Ivanovskiy khimiko-tehnologicheskiy institut. Kafedra
organicheskoy khimii.
(Sulfone) (Sulfonic acid) (Benzene)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3

STARKOV, S.P.

Synthesis of 4,4'-dichlorobenzophenone. Trudy IREA no.25:
131-134 '63. (MIRA 18:6)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3"

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3

STARKOV, S.P.; BURMISTROV, V.T.

Synthesis of 2,5-dimethylacetophenone. Trudy IREA no.25:
135-138 '63. (MIRA 18:6)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3"

KOKHANOVA, I.V.; REDNIKOVA, T.A.; STARKOV, S.P.; YEGIDIS, F M.;
TARANENKO, A.S.; ZOLOTAREVA, K.A.

Ion-exchange resins as catalysts in organic synthesis. Part 2;
Arylalkylation of n-cresol with styrene on KU-1 and KU-2 cation
exchange resins. Zhur. org. khim. 1 no.4:648-649 Ap '65.
(MIRA 18:11)

1. Nauchno-issledovatel'skiy institut khimikatov dlya polimernykh
materialov i Tambovskiy gosudarstvennyy pedagogicheskiy institut.

STARKOV, V. (Moskovskaya oblast')

Fire at the electric power plant of a state farm. Pozhodelo 6
no.10:21 0 !60. (MIRA 13:10)
(Naro-Fominsk area--Electric power plants--Fires and fire prevention)

STARKOV, V., inzh.

Transfer of RMZ cranes to liquid fuel. Rech.transp. 19
no.7:39-41 J1 '60. (MIRA 13:8)

1. Gor'kovskoye lineynoye parohodstvo.
(Cranes, derricks, etc.) (Liquid fuels)

POLYAK, A. L., kand. tekhn. nauk; NIKOLAYENKO, A. T., inzh.; GRICHENKO, R. N., inzh.; BAKUL', V. N., kand. tekhn. nauk; ISAKOV, E. I., inzh.; STARKOV, V. I., inzh.

Efficient geometry and makes of hard alloys for the blades of gutter locators with a planetary-cutting actuating member.
(MIRA 15:10)
Ugol' Ukr. 6 no.10:20-22 0 '62.

1. Ukrainskiy nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii shakhtnogo stroitel'stva (for Polyak, Nikolayenko, Grichenko). 2. Ukrainskiy nauchno-issledovatel'skiy institut sinteticheskikh sverkhtverdykh materialov i instrumentov (for Bakul', Isakov, Starkov).

(Coal mining machinery)

BAKUL', V.N., kand. tekhn. nauk; ZAKHARENKO, I.P., kand. tekhn. nauk;
CHEPOVETSKIY, I.Kh., inzh.; STARKOV, V.I., inzh.

Sectional hard-alloy milling cutter with an eccentric clamp.
Der. prom. 12 no. 12:21-22 D '63. (MIRA 17:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut sinteticheskikh sverkhtverdykh materialov i instrumenta.

ARTSIMOVICH, G.V., kand. tekhn. nauk; ASYCHENKO, Ye.I., kand. tekhn. nauk;
STARKOV, V.I., inzh.; MOSKALENKO, V.P., inzh.; FISHMAN, A.I., inzh.

Using hard-alloy tools in boring frozen soils with the EKGM machines.
Stroi. i dor. mash. 10 no.10:24-25 0 '65. (MIRA 18:10)

TREYVUS, M.N., dotsent; STARKOV, V.L., inzh.

Calculation of the overburden load removal flow by linear programming
methods. Izv. vys. ucheb. zav.; gor. zhur. 8 no.2:89-92 '65.

(MIRA 18:5)

1. Magnitogorskiy gornometallurgicheskiy institut imeni G.I.Nosova

STARKOV, V. M. Cand Tech Sci -- (diss) "Preparation of permafrost polygons for dredging by the method of natural thawing." Mos, 1959. 20 pp (Min of Higher Education USSR. Krasnoyarsk Inst of Nonferrous Metals im M. I. Kalinin. Chair of Working of Ore and Alluvial Deposits), 150 copies (KL, 43-59, 125)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3

STARKOV, V. M., Cand of Tech Sci -- (diss) "Unfolding of a surface with an edge recovery according to a method of substituting them with other surfaces." Leningrad, 1957, 11 pp (Leningrad Technological Institute im Lensovet), 100 copies (KL, 34-57, 90)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3"

40990

18.1152

S/659/62/009/000/027/030
I003/I203

AUTHORS Savitskiy, Ye. M., Tylkina, M. A., Zhdanova, L. L., Zubkova, L. A., Starkov, V. N.
Fokin, A. G., Petrova, L. S., and Arkusha, T. I.

TITLE The properties of rhenium, rhenium-tungsten and rhenium-molybdenum alloys

SOURCE Akademiya nauk SSSR. Institut metallurgii. Issledovaniya po zharoprochnym splavam.
v. 9. 1962. Materialy Nauchnoy sessii po zharoprochnym splavam (1961 g.), 194-203

TEXT Modern technology demands the most refractory metals such as W, Re, Ta and Mo. In the present work the microstructure and the mechanical properties of Re-W and Re-Mo were investigated at room and at 2600°-3400°C. Methods of casting and of plastic deformation of W-Re, Mo-Re and W-Mo-Re alloys were developed. It was shown that when tungsten and molybdenum are alloyed with rhenium there is an increase in plasticity in machinability in weldability and in strength, and the temperature of recrystallization increases by 400-500°C. There are 4 figures and 1 table.

Card 1/1

L 29920-6 EWP(k)/EWT(m)/T/EWP(w)/EWP(t)/ETI IJP(c) DJ/JD/HW/JG
ACC NR: AP6017300 (A, N) SOURCE CODE: UR/0136/66/000/005/0093/0094 (4)

AUTHOR: Krupin, A. V.; Pavlov, I. M.; Linetskiy, B. L.; Chernyshev, V. N.; Zarapin, Yu. L.; Starkov, V. N.; Korchagin, P. A.; Vinogradov, V. V.; Tyukalov, T. V.

56

B

ORG: none

TITLE: Rolling of tungsten and molybdenum under conditions of low partial pressures of oxygen

SOURCE: Tsvetnyye metally, no. 5, 1966, 93-94

TOPIC TAGS: tungsten, molybdenum, hot rolling, tungsten rolling, molybdenum rolling, vacuum rolling

ABSTRACT: Tungsten and molybdenum plates (8 x 40 x 150 mm) preforged or prerolled from sintered ingots were hot rolled in air, argon containing 0.03% O₂ and 0.01% N₂, or in a vacuum of 0.1—0.005 mm Hg. Tungsten was rolled at 1200, 1300, and 1450°C with reductions of 10, 20, and 30% per pass; molybdenum was rolled at 950, 1050, and 1150°C with reductions of 10, 20, 30, 50, and 55% per pass. A sharp increase in the roll pressure, torque, forward slip, and friction coefficient was observed with change from air atmosphere to a pressure of 0.1 mm Hg. This was caused by increased friction. Lowering the pressure from 0.1 to 0.005 mm Hg had little or no additional effect. Increasing the rolling temperature in vacuum of 0.01 mm Hg had an insignificant effect on the specific pressure in rolling molybdenum, but appreciably

Card 1/2

UDC: 669.27/.28:621.771

L 29920-66

ACC NR: AP6017300

decreased the specific pressure in rolling tungsten, e.g., from 74 at 1200C to 64 and 60 kg/mm² at 1300 and 1450C, respectively. The specific pressure increased with increasing reduction. In rolling tungsten in a vacuum of 0.1 mm Hg, increasing the reduction from 20 to 30% led to a specific pressure increase from 74 to 91 kg/mm² at 1200C and from 60 to 69 kg/mm² at 1450C. In rolling molybdenum the specific pressure increased from 44 to 96.5 kg/mm² with increasing reduction from 10 to 45% at 1050C. In vacuum rolling at high temperatures and reductions a sticking of metal to the rolls was observed. In rolling of tungsten at 1450C with a reduction of 35%, an intensive sticking resulted in splitting of metal. Little or no sticking was observed at 1200C. Noticeable sticking was observed in rolling molybdenum at 1150C. (MS)

SUB CODE: 11,13/ SUBM DATE: none/ ORIG REF: 001/ ATD PRESS: 5011

Card 2/2 1c

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3

DADIOMOV, Yu.R., inzh.; KISHKO, V.I., inzh.; STARKOV, V.S., inzh.

Automatic log dropping on a sorting conveyor. Mekh. i avtom.
proizv. 17 no. 3:32 Mr '63. (MIRA 17:9)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3"

KORNIYENKO, A.M.; SHTEL'MAKHOV, M.S.; GEYLER, Z.Sh.; TSYRUL'NIKOV, I.M.;
SHLEYFER, M.L.; PELIKS, A.Ya.; BRONSSTEYN, V.S.; BERESNEV, V.A.;
KUZAKHMETOV, Sh.G.; STARKOV, V.T.; VARAKSA, A.P.; ZHELEZNYAKOV,
V.V.; STEL'MAN, L.N.; SUKHANOV, V.B.

Authors' certificates and patents. Mashinostroenie no.6:101-102
(MIRA 18:12)
N-D '65.

S/058/61/000/007/057/086
A001/A101

AUTHOR: Starkov, V.V.

TITLE: Humidity effect on the initial streamer zone of positive corona

PERIODICAL: Referativnyy zhurnal. Fizika, no. 7, 1959, 305, abstract 7Zh107
("Uch. zap. Khabarovskiy gos. ped. in-t. Fiz.-matem. ser.", 1959,
v. 1, 51 - 58)

TEXT: The author investigated the corona discharge between a cylindrical Pt-point of 1.0 mm diameter with a semispherical end and a brass tube 120 mm diameter on whose axis was placed the point end. Measurements were conducted at atmospheric pressure, natural ionization and with γ -preparation of 0.03 mCurie. It was established that the number of initial streamers per unit of time decreases, at a constant humidity, with increasing initial ionization. This is explained by appearance of initial electrons at the instants when the field near the point is weakened by a positive volume charge, due to which fact a flare pulse arises preventing a streamer formation. With increasing air humidity, one observes a decrease in the number of initial streamers on the left side of the maximum on the voltage-dependence curves; this is explained by the weakening of

Card 1/2

Humidity effect ...

S/058/61/000/007/067/086
A001/A101

✓

the primary pulse on account of capture of electrons by H₂O vapors. The number of initial streamers is maximum and on the right side of the maximum increases with increasing humidity and moreover, the zone of streamer occurrence is broadening (range of voltages). This is explained by increasing effectiveness of photoionization and decreasing (due to capture of electrons by water vapors) duration of flare pulse following the streamer.

V. K.

[Abstracter's note: Complete translation]

Card 2/2

STAR KOV, Yu.

84-9-38/47

AUTHOR: Starkov, Yu.

TITLE: Komsomol Members Organize Leisure for the Youth (Komsomol'tsy
organizuyut dosug molodezhi)

PERIODICAL: Grazhdansksya Aviatsiya, 1957, Nr 9, p. 35 (USSR)

ABSTRACT: The Komsomol members, under their chief, comrade Sidorov, have
organized recreational programs at the Magdagachi airport.

AVAILABLE: Library of Congress

Card: 1/1

ULIKOV, N.I.; SHAROV, V.L.; VOKHANTSEV, M.F.; KORABEL'NIKOV, P.S.;
BOGUSLAVSKAYA, I.S.; STARKOV, Yu.F.; SAMSONOV, B.P.

Conveyer-type drying and impregnating oven. Prom.energ. 15
no.2:19 F '60. (MIRA 13:5)
(Electric motors)

ZOTEYEV, G.P., master; PADERIN, I.D., master; STARKOV, Yu.L.

Servicing high-temperature air preheaters. Metallurg
IG no.1:12-13 Ja '65. (MIRA 18:4)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat. 2. Starshiy
gazevshchik Nizhne-Tagil'skogo metallurgicheskogo kombinata
(for Starkov).

MININ, N. P. --"The Use of Antibiotics in Wine Production and in the Manufacture of Cider." *(Dissertation for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions) Min of Industry of Provisions USSR (Glavino), All-Union Sci Res Inst of Wine Production and Wine Culture ("Magarach"), Tbilisi, 1955.

SP: Inishkaja Letopis', No. 25, 14 Jun '55

* For Degree of Doctor of Technical Sciences

STAROV, Yu. M.

✓ Effect of 2-methyl-1,4-naphthoquinone on yeast respiration. Yu. M. Starov. *Doklady Akad. Nauk S.S.R.* 104, 287-90 (1955).—A manometric study of the effect of 2-methyl-1,4-naphthoquinone (I) on the respiration of *Saccharomyces ellipsoidea*, *S. carlsbergensis*, and *S. apiculatus* in phosphate buffer at pH 5.3 revealed that at first I activates the aerobic phase of yeast mobility, but after 2 hrs. the effect is neg. I represses anaerobic respiration only in the presence of O₂. Pretreatment of yeast with I(1-20 hrs.) results in increased fermentation after 1-hr. pretreatment, but longer pretreatment lowers fermenting ability. I represses enzyme activity even in cell-free yeast juice in the presence of O₂. G. M. Kosolapoff.

Country	: USSR
Category	: Microbiology. Antibiosis and Symbiosis. Antibiotics.
Abs. Jour	: Ref Zhur-Biol., No 23, 1958, No 103712
Author	: Starkov Yu. M.
Institut.	: Academy of Sciences USSR
Title	: The Mechanism of Inactivation of Quinone-Antibiotics by Yeasts
Orig. Pub.	: Dokl. AN SSSR, 1956, 110, No 4, 696-698
Abstract	: A study was made of the effect of 2-methyl-1,4-naphthoquinone (methinone) on <u>Saccharomyces ellipsoideus</u> of the Cahuri-2 and Pichia races. After repeated transplantations of the yeasts on media containing methinone they showed no increase in resistance. It was shown by the experiments that a reduction of methinone to hydroquinone, which has no antibacterial effect, occurs under the influence of the active dehydrases of the yeast cell. Under aerobic conditions, the reduction of quinone to the hydroquinone is not so easy.--I. A. Pavlenko.
Card:	1/1

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"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3

STARKOVA, A., inzhener.

Fixing crews in the Kuznetsk Basin mines. Mast.ugl. 5 no.6:23-24
Je '56. (MLRA 9:8)
(Kuznetsk Basin--Coal mining machinery)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3"

STARKOVA, A. D.

"An Aluminum Asphalt-Bitumen Paint" (Alyuminiiyeveya Asfal'to-bitumnnaya Kraska),
A. A. Latyshev and A. D. Starkova, edited by B. R. Mirenskiy, Goskhimizdat,
Moscow/Leningrad, 1949, 40 pages, 2 rubles.

Description of the paint Al=277.

SO: Uspekhi Khimii, Vol 18, #6, 1949; Vol 19, #1, 1950 (W-10083)

STARKOVA, A.G.

Glushko, L.G. i Starkova, A.G.

33863. Obrabotka korryespondiruyshikh Fotografiy Dvukh Myetyeovrov.
Byullyetyen', Vsyesoyuz. Astron. - Gyeodyez. O-va. No 7, 1949, C. 28-31.

SO: Letopis' Zhurnal'nykh Statey, Vol. 46, Moskva, 1949.

STARKOVA, A. G.

AID P - 845

Subject : USSR/Astronomy

Card 1/1 Pub. 8 - 4/13

Authors : Lyubimova, Ye. A. and Starkova, A. G.

Title : About Radioactive Heating of Large Asteroids and
Structure of Meteorites

Periodical : Astron. zhur., v. 31-5, 429-432, S-0 1954

Abstract : The results of computed temperature changes at the center
of bodies similar to large asteroids ($d = 100 - 400 \text{ km}$)
heated by radioactive energy, accumulated in the past 3
to 5 million years are cited. This explains the signs of
fusion in the meteorites, assumed to be splinters of the
asteroids. 2 graphs, a table, formulae, 8 references of
which 6 are Russian.

Institution : Geophys. Institute of the Acad. of Sci., USSR

Submitted : N 9, 1954

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3

STARKOVA, A.G.

Radioactive elements in meteorites. Meteoritika no.13:19-32 '55.
(Meteorites) (Radioactive substances) (MLRA 9:2)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3"

STARKOVA, A.G.

LEVIN, B.Yu.; KOZLOVSKAYA, S.V.; STARKOVA, A.G.

Mean chemical composition of meteorites. Meteoritika no.14:38-53
'56. (MLRA 10:1)

(Meteorites)

MIRTOV, B.A.; STARKOVA, A.G.

Quantitative thermometric analysis of binary gas mixtures.
Zav.lab. 28 no.10:1194-1197 '62. (MIRA 15:10)

1. Institut prikladnoy geofiziki AN SSSR.
(Gases—Analysis) (Thermometry)

ACCESSION NR: AP4035090

S/ 0032/64/000/005/0575/0577

AUTHORS: Mirtov, B. A.; Starkova, A. G.

TITLE: The application of thermometric analysis to determining the composition of binary gas mixtures

SOURCE: Zavodskaya laboratoriya, no. 5, 1964, 575-577

TOPIC TAGS: thermometric analysis, high frequency discharge analysis, binary gas mixture, temperature measurement, argon admixture, oxygen admixture

ABSTRACT: The thermometric analysis consisted of measuring (with an electrocouple) the wall temperature of a capillary containing the gas mixture in which a high frequency current was generated. Experiments were performed on Xe, Ar, Ne, He, N₂, O₂, H₂, and CO₂, with each of these gases used as the main ingredient and all the others in turn constituting minor additions. The analysis is based on the principle that during the discharge every gas heats to a certain temperature and that any group contains "cooler" and "hotter" gases. The optimal conditions for analysis of a binary mixture exist when one of the constituents belongs to the "cold" group and the other to the "hot" group. The method used here showed the highest sensitivity when multivalent "hot" gases constituted the admixture to a
Card 1/3

ACCESSION NR: AP4035090

"cold" gas base. Under this condition it was possible to determine admixture content down to the 0.01-0.1% range (as little as 0.5 - 0.05% of xenon may be determined in multivalent "hot" gases). The summary of the analyses is shown in Table 1 of the Enclosure. Orig. art. has: 1 table and 4 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 20May64

ENCL: 01

SUB CODE: GC

NO REF SOV: 001

OTHER: 000

Card 2/3

STARCOVA, A. V.

"Increasing the Drought Resistance and Productivity of Perennial Grasses
in the Arid Zone of Alma-Atinskaya Oblast." Cand biol Sci. Inst of Botany,
Acad Sci Kasakh SSR, Alma -Ata, 1953. (RZhBiol, No 7, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR
Higher Educational Institutions (12)
SC: Sum. No. 556, 24 Jun 55

M-4

USSR/Cultivated Plants - Grains.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39198

Author : Dobrunov, L.G., Gladysheva, O.M., Starkova, A.V.,
Polimbetova, F.A., Taranova, O.N.

Inst : Institute of Botany, Academy of Sciences Kazakh SSR

Title : Increase in Drought Resistance and Yield Capacity of
Wheats in the New Land Reclamation Zone of Northern
Kazakhstan.

Orig Pub : Fiziol. rasteniy, 1957, 4, No 2, 205-208.

Abstract : The increase in wheat drought resistance by using B, Gra-
mulated P_c and by hardening seeds against drought before
sowing (drying the seeds and treating them by calcium
chloride) was studied by the Institute of botany of the
in Kazakh SSR. The method which was studied has brought
about important changes in physiological processes

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- 23 -

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3

STARKOVA, A. V.

Increasing the drought resistance and yield of corn. Vest. AN Kazakh.
SSR 16 no. 7:103-104 J1 '60. (MIRA 13:8)
(Corn (Maize))

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652920012-3"

STARKOVA, A.V.

Effect of stand density on the physiological characteristics of
corn. Izv. AN Kazakh. SSR. Ser. bot. i pochv. no.1:35-44 '61.
(MIRA 14:4)

(Corn (Maize)) (Plants, Space arrangement of)

STARKOVA, B.; VYSTRcil, A.; STARKA, L.

"Preparation of nitro derivatives of carbazole by the Graebe-Ullmann synthesis. In German."

p. 1019 (Collection of Czechoslovak Chemical Communications. Sbornik Chekhoslovatskikh Khimicheskikh Rabot.) Vol. 22, no. 3, June 1957.
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

STAR KOVA,
CZECHOSLOVAKIA / Organic Chemistry, Synthetic Organic Chemistry G-2

Abs Jour : Ref. Zhur.-Khimiya, No 3, 1958, 7965

Author : Starkova, Vystrcil, Staska

Inst : Not given

Title : Preparing Nitro derivatives of Carbazole by the Graebe-Ullmann Synthesis

Orig Pub : Chem. listy, 1957, 51, No 3, 536-538; Sb. chekhol. khim. rabot, 1957, 22, No 3, 1019-1022.

Abstract : A modification of the Graebe-Ullmann synthesis of carbazole derivatives using m- $(O_2N)_2C_6H_4$ (I) as the reaction medium is described. The method is suitable for the synthesis of nitrocabazoles, but is not applicable to the preparation of methoxycarbazoles. Under these conditions, methoxyphenylbenzotriazoles do not react. 1-(2',4'-dinitrophenyl)-ben-

Card 1/3

STARKOVA, BELA

CZECHOSLOVAKIA / Physical Chemistry. Electrochemistry.

B-12

Abs Jour : Ref Zhur - Khim., No 10, 1958, No 31893

Author : Lubos Starka, Alois Vystrcil, Bola Starkova

Inst : -

Title : Upon the Polarographing Anthraquinone Derivatives in
Glacial Acetic Acid.

Orig Pub : Chem. listy, 1957, 51, No 8, 1440-1448; Collect. czochosl.
cham. comm., 1958, 23, No 2, 206-215.

Abstract : The polarographic behavior of some substituted anthra-
quinone (I) and helianthrone (II) derivatives in glacial
 CH_3COOH with 10% ual H_2SO_4 as background was studied. In
the cases of all the 40 studied I and II derivatives, two-
electron diffusion reduction waves, usually accompanied by
adsorption phenomena, are observed. Kalousek's commutator
was used for the study of reversibility of the electron pro-
cess. The inclination of the curves is less than that which

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CZECHOSLOVAKIA / Physical Chemistry. Electrochemistry.

B-12

Abstr Jour : Rof Zhur - Khim., No 10, 1958, No 31893

1-benzoylamino-2-chloro-I = -0.23₈ v; 1-amino-2,4-dibromo-I = -0.22₆ v; 1-amino-2-methyl-4-chloro-I = -0.22₇ v; 1-amino-2-methyl-4-bromo-I = -0.23₃ v; 1-acetylaminó-2-methyl-4-bromo-I = -0.23₉ v; 1-sulfonic acid-I = -0.20₀ v; 1-chloro-I = -0.23₇ v; 2-chloro-I = -0.28₄ v; 1,5-dichloro-I = -0.24₄ v; 2,6-dichloro-I = -0.26₆ v; 1-chloro-2-carboxy-I = -0.24₀ v; phanthraquinone = 0.05 v; holianthrone (II) = -0.18 v; 4,4'-dioxy-2,2'-dimethyl-II = -0.20 v; 4,4'-dioxy-3,3'-dimethoxy-II = -0.25 v. The substitution with the -OH group in the α or β position causes a δ_1 shift of 50 mv to the negative side. The substitution with the -Cl, -OC₂H₅, -OCOCH₃ and -CH₃ groups in the β position causes a δ_2 shift of 15 mv to the negative side, but the same groups in the α position cause a shift to the positive side. Induction effects prevail in the case of substitution in the α position, and tautomeric effects prevail in the case of

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CZECHOSLOVAKIA / Physical Chemistry. Electrochemistry.

B-12

Abstr Jour : Rof Zhur - Khim., No 10, 1958, No 31893

Author : Lubos Starka, Alois Vystrecil, Bela Starkova

Abstract : substitution in the β position. The kinetics of photo-dohydrogonation was also studied.

Card 4/4

STARKOVA, Bela, promovany chemik

Continuous measurement of the sulfur dioxide in combustion products.
Energetika Cz 11 no.7:339-341 Jl '61.

MIRSKOVA, V.N.; STARKOVA, G.A.; VOYUTSKAYA, M.I.; TARASOVA, N.I.; TRET'YAKOVA, K.S.

Use of a reduced dose of pepsin in the purification and concentration of sera by means of the Diaferm-3 method. Zhur. mikrobiol. epid i immun. 31 no.6:116 Je '60. (MIRA 13:8)

1. Iz Permskogo instituta vaktsin i svvorotok.
(PEPSIN) (SERUM)